

Art Unit 1732

Claim 28 would be amended as follows:

line 2,               -- stay-in-place -- would be inserted before "composite".

Claim 29 would be replaced by the following:

29.     A method of manufacturing a concrete support structure using a stay-in-place composite shell,  
the method comprising the steps of:

          wrapping a water-impermeable liner around a mandrel;

          wrapping a fabric layer having a plurality of fibers[,] around an exterior surface of the water-  
impermeable liner;

          impregnating the fabric layer with a resin matrix; [and]

          separating the mandrel from the water-impermeable liner and fabric layer once the resin matrix  
cures[,] to form a stay-in-place composite shell having an inner wall surface defining an enclosure into  
which concrete may be poured and allowed to harden to form a concrete core[,] and

pouring concrete into the enclosure to form a concrete support structure comprising the concrete  
core and the composite shell bonded to the concrete core;

          wherein the plurality of fibers elongate as concrete is poured into the enclosure of the composite  
shell due to a weight of the concrete, and partially shrink back as the concrete dries to compensate for  
shrinkage of the concrete, and

          wherein the water-impermeable liner is wrapped with its lateral edges secured together to line an  
inner wall surface of the composite shell and protects the composite shell from alkalinity in the concrete  
core.

Claim 30 would be amended as follow:

line 3,               "," would be deleted after "fibers".

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Claim 31 would be replaced by the following:

31. A method of manufacturing a concrete support structure using a stay-in-place composite shell, the method comprising the steps of:

wrapping a water-impermeable liner around an exterior surface of a reusable form;

rotating the reusable form about an axis while applying a fabric layer impregnated with a resin matrix and having a plurality of fibers[,] to the exterior surface of the water-impermeable liner; [and]

removing the reusable form once the resin cures[,] to form a stay-in-place composite shell having an inner wall surface defining an enclosure into which concrete may be poured and allowed to harden to form a concrete core[.]; and

pouring concrete into the enclosure to form a concrete support structure comprising the concrete core and the composite shell bonded to the concrete core;

wherein the plurality of fibers elongate as concrete is poured into the enclosure of the composite shell due to a weight of the concrete, and partially shrink back as the concrete dries to compensate for shrinkage of the concrete, and

wherein the liner is wrapped with its lateral edges secured together to line an inner wall surface of the composite shell and protects the composite shell from alkalinity in the concrete core.